

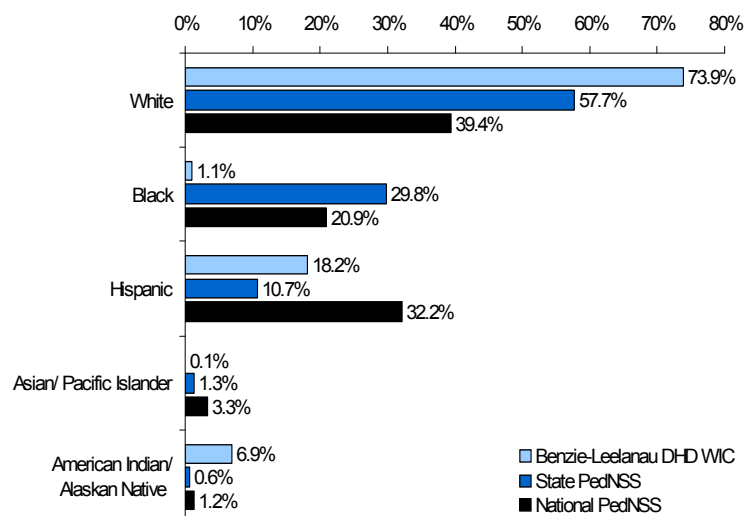
2003 WIC Local Agency Pediatric Nutrition Surveillance System (PedNSS) Report

The goal of Michigan WIC is to improve the health outcome of low income nutritionally at-risk women and children by providing supplemental nutritious foods, offering nutrition education/counseling, breastfeeding support, and referral to other health and social services. This report is developed to provide specific local information regarding the health and nutritional status of WIC participants. In order to provide local statistics stratified by age and race/ethnicity, three-year averages were calculated for each health indicator. Consequently, point estimates represent the incidence or prevalence of an indicator between the years 2001 and 2003. Trends were constructed using rolling averages and cover the period between 1998 and 2003.

Benzie and Leelanau counties are located in the northwestern tip of the lower peninsula of Michigan. The combined children under the age of five years old in the area was 2,012 or 5.4% of the total number of residents (reported in the 2000 U.S.). One in ten (10.0%) children under five years old lived below poverty. Benzie-Leelanau District Health Department (Benzie-Leelanau DHD) provide WIC services to eligible residents in the area. Approximately, 753 children served in Michigan WIC were served by Benzie-Leelanau DHD in 2003. PedNSS data about WIC participants in Benzie-Leelanau DHD revealed:

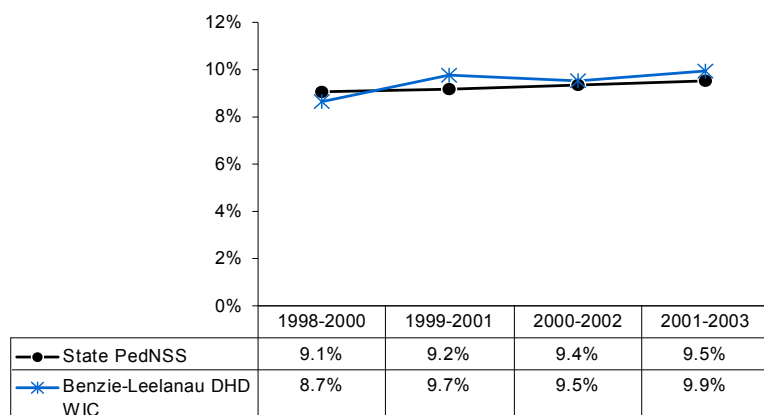
- 11.7% of White infants were low birthweight infants;
- 11.2% of all infants were high birthweight infants;
- The prevalence of short stature among Hispanic infants and children under the age of two years old was 16.0%;
- One third of children two to five years old (33.3%) were either overweight or at risk of overweight;
- 17.6% of Hispanic infants and children under five years old had iron deficiency anemia;
- The overall prevalence of infants ever breastfed was 73.1%.

Figure 1. **Racial/ethnic distribution** among participants under five years old, 2001-2003 PedNSS



Non-Hispanic White, Hispanic and American Indian/Alaskan Native infants and children under five years old make up the vast majority of participants in Benzie-Leelanau DHD WIC.

Figure 2. Trend in **low birthweight*** among infants in the Benzie-Leelanau DHD WIC Agency, 1998-2003 MI PedNSS



*Low birthweight is defined as having a birthweight less than 2500 grams (5lbs 9 oz) regardless of gestational age.

The average annual percent increase in the incidence of low birthweight for Benzie-Leelanau DHD WIC infants was 4.8% per year.

The trend in infants and children under two years old ever breastfed declined among American Indian/Alaskan Native participants by an average of 3.8% per year.

Figure 3. Trend in **ever breastfed** by race/ethnicity among infants in the Benzie-Leelanau DHD WIC Agency, 1998-2003 PedNSS

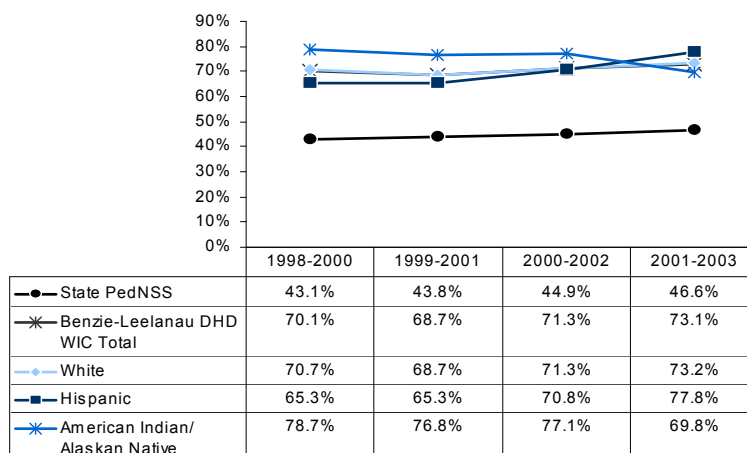
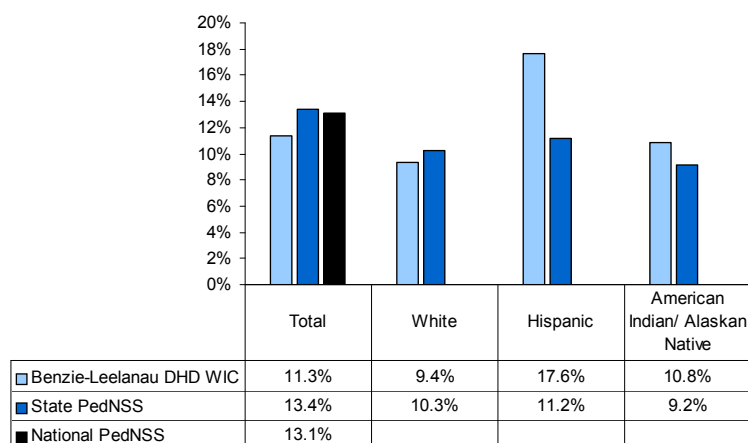


Figure 4. **Iron deficiency anemia*** by race/ethnicity among infants and children under five years old in the Benzie-Leelanau DHD WIC Agency, 1998-2003 PedNSS

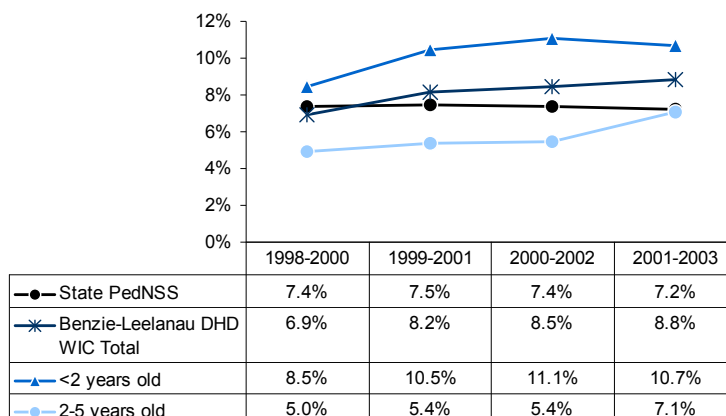


*For infants under the age of one year, iron deficiency anemia is defined as having either a hemoglobin concentration of 11.0 g/dL or a hematocrit level of less than 33%. For children two to five years old, iron deficiency anemia is defined as having either a hemoglobin concentration less than 11.1 g/dL or a hematocrit level below 33.3%.

The greatest decline in the prevalence of iron deficiency anemia was observed in White participants of Benzie-Leelanau DHD WIC: average annual declined equaling 14.8%.

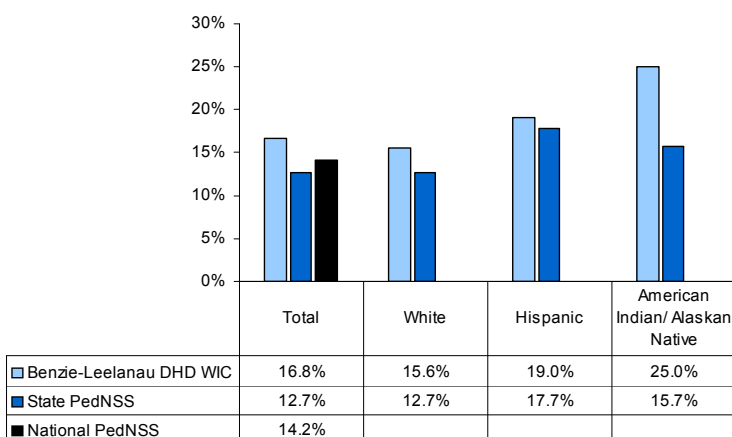
The prevalence of short stature increased by 42% among Benzie-Leelanau DHD WIC children two to five years old.

Figure 5. Trend in **short stature*** by age group among infants and children under five years old, 1998-2003 MI PedNSS



*Short stature is defined as having a height-for-age below the 5th percentile of the National Center for Health Statistics and Centers for Disease Control and Prevention (NCHS/CDC) age- and gender- specific growth chart.

Figure 6. Average prevalence of **overweight*** by race/ethnicity among children two to five years old, 2001-2003 PedNSS

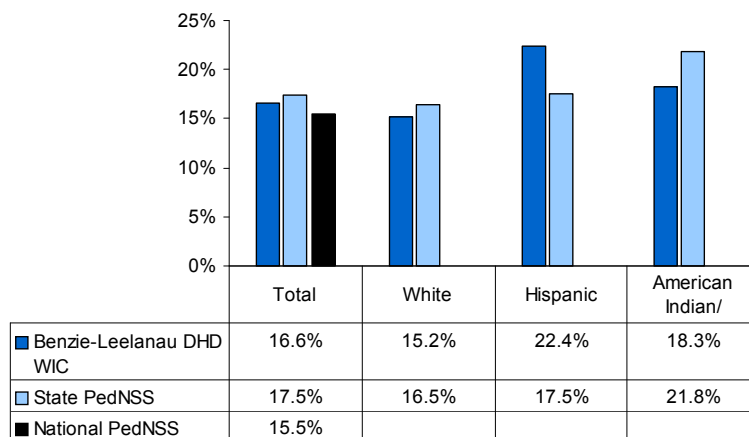


*Overweight is defined as having a weight-for-height greater than the 95th percentile of the National Center for Health Statistics and Centers for Disease Control and Prevention (NCHS/CDC) age- and gender- specific growth chart.

One in five Hispanic children two to five years old and one in four American Indian/Alaskan Native children two to five years old of Benzie-Leelanau DHD WIC were overweight.

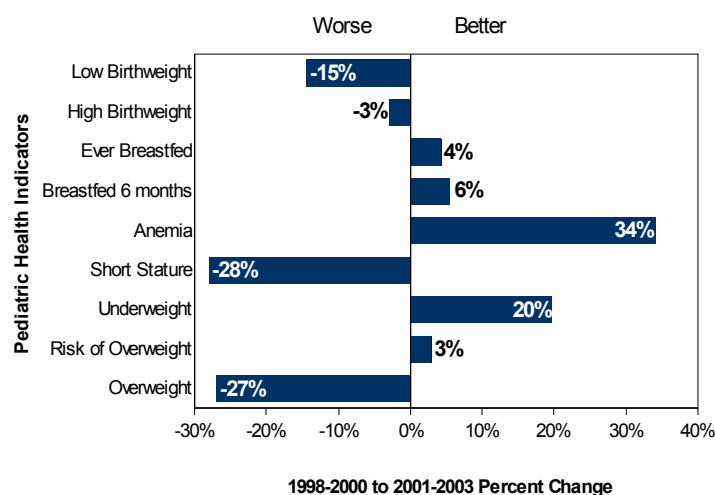
Hispanic children two to five years old have the highest prevalence of risk of overweight among children two to five years old in Benzie-Leelanau DHD WIC.

Figure 7. Average prevalence of **risk of overweight*** by race/ethnicity among children two to five years old, 2001-2003 PedNSS



*Risk of overweight is defined as having a weight-for-height between the 85th and the 95th percentile of the National Center for Health Statistics and Centers for Disease Control and Prevention (NCHS/CDC) age- and gender- specific growth chart.

Figure 8. Pediatric **health progress review** for Benzie-Leelanau DHD WIC infants and children under five years old, 1998-2000 and 2001-2003 MI PedNSS



Improvement was observed in four of nine health/nutritional indicators of Benzie-Leelanau DHD WIC, especially in the area of iron deficiency anemia.



Jennifer M. Granholm, Governor

Janet Olszewski, Director

Suggested Citation:

Larrieux C, Eghtedary K, Grigorescu V, Carr A. "2003 WIC Local Agency PedNSS Report Benzie-Leelanau District Health Department." WIC Division, Bureau of Family, Maternal, and Child Health, Michigan Department of Community Health. April 2007.

For more information, please contact:

WIC Division
Michigan Department of Community Health
Lewis Cass Building
6th floor

320 South Walnut Street
Lansing, MI 48913

Website: <http://www.michigan.gov/wic>
E-mail: MichiganWic@michigan.gov

Michigan Department of Community Health

WIC Program

Mission Statement

The mission of the Michigan WIC program is to improve the health outcomes and quality of life for eligible women, infants, and children by providing nutritious food, nutrition education, breastfeeding promotion, and support and referrals to health and other services. To this end:

- Delivery of services and supports are to be provided in a caring, respectful, efficient, and cost effective manner.
- Delivery of services shall be provided in a culturally competent and confidential manner.
- The WIC Program shall assure the broadest possible access to services, supports, and food.